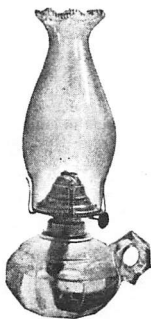


KEROSENE is an important petroleum product, used chiefly as fuel. At one time, kerosene lamps were the chief source of artificial lighting. In the petroleum industry, kerosene is spelled *kerosine*.

Abraham Gesner, a Canadian doctor and geologist, patented a distilling process for refining oil in 1854. He produced an improved lighting oil which he called *kerosene*. He derived the name kerosene from the Greek word *keros*, which means *wax*. He refined the oil from coal, and for this reason kerosene was also called *coal oil*.

Uses. Kerosene's greatest use is in jet aircraft engines. Both turboprop and the conventional ramjet engines use it as fuel. Commercial jet aircraft in the United States and Canada use kerosene. Military aircraft use a mixture of kerosene and gasoline. Kerosene still supplies lighting and cooking fuel in areas far from electricity. Many farmers use kerosene to run tractors and other farm machinery. Kerosene operates the electric generators that charge storage batteries on farms and in small villages. It is also used as a solvent for weed killers and insecticides.

Production. Kerosene is a product of petroleum refinery processes. Industry processes kerosene to re-



Westinghouse

The Kerosene Lamp with its tall glass chimney came into use in the mid-1800's.

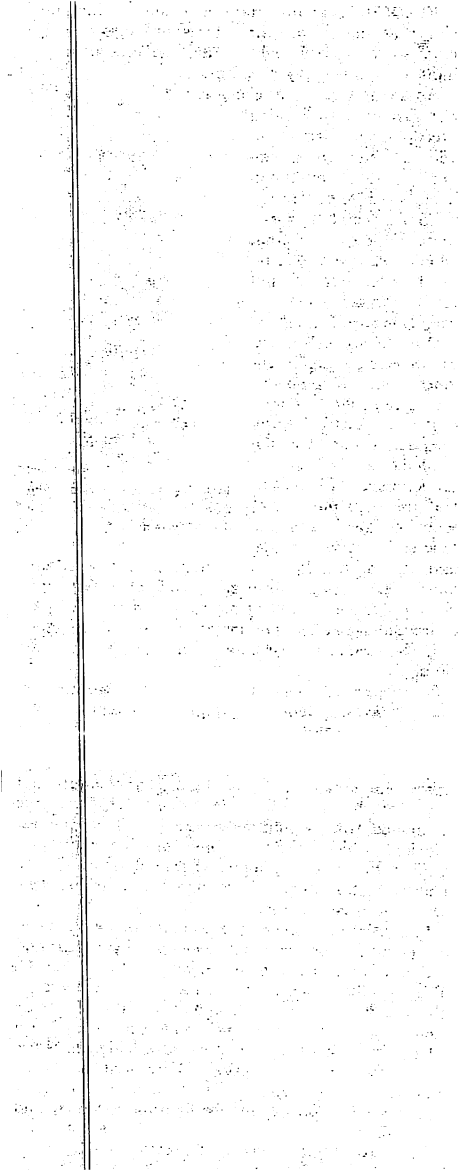
WBK K-236

move impurities such as sulfur compounds and some of the aromatic hydrocarbons. The kerosene is treated with a suitable solvent like liquid sulfur dioxide, which dissolves some of the impurities. Usually this process is repeated several times. In the United States, about 323 million barrels of kerosene are produced each year.

Properties. Kerosene is a mixture of *hydrocarbons*, compounds containing the elements hydrogen and carbon. This mixture boils between 150 and 300° C. The specific gravity, or density, of kerosene is about 0.800. Some of the compounds in kerosene are *aromatic* hydrocarbons. When kerosene is used as a solvent for weed killers and insecticides, a high aromatic hydrocarbon content is desirable because it makes the substance a better solvent. But the aromatics in kerosene produce a poor flame for lighting purposes, and much smoke.

LEWIS F. HATCH

See also HYDROCARBON; PETROLEUM (Refining); Rocket (Rocket Propellant)





Pioneer
cabinet



OCT 93



THEY RULED THEN AS NOW

Baby days, from the earliest times, have been close to the hearts of Utahns. In ruggedness or splendor, the comfort and welfare of little tots has been an ideal of home and community life.

Twins, according to this photograph, submitted by Miss Margaret Ensign, 256-6th East, were specially favored. They rode in regal splendor, as the picture testifies.

What's so different about that? They still do.

Time was, however, when they rode tandem, boy up front, girl in back. Now, they get their airings, side by side. Equal rights, perhaps! Back in those days, good baby carriages were hard to get, particularly two-seaters. This one may have been fashioned by hand.

Even babies have not escaped the march of progress.